



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,154	09/25/2000	Kaare M. Gautvik	016777/0433 2686	
75	90 08/13/2004		EXAMINER	
FOLEY & LARDNER 3000 K Street NW			HILL, MYRON G	
Suite 500	, vv		ART UNIT	PAPER NUMBER
Washington, DC 20007			1648	
			DATE MAILED: 08/13/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)				
		09/668,154 GAUTVIK ET AL.					
		Examiner	Art Unit				
		Myron G. Hill	1648				
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. a period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ARANDONE	nely filed s will be considered timely. the mailing date of this communication.				
Status							
1)⊠)⊠ Responsive to communication(s) filed on <u>01 June 2004</u> .						
2a) <u></u> □	This action is FINAL . 2b)⊠ This	action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Dispositi	on of Claims						
4)	Claim(s) 21 and 22 is/are pending in the application	ation.					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>21 and 22</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	election requirement.					
Application Papers							
9)[The specification is objected to by the Examiner						
	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the o						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119						
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
	a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received						
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 							
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment	(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) 🔲 Notice	of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Dat	e				
	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	5) Notice of Informal Pa	tent Application (PTO-152)				

Art Unit: 1648

DETAILED ACTION

This action is in response to paper filed May 3, 2004.

Claims 21 and 22 are under consideration.

Rejections Withdrawn

Double Patenting

The rejection of claim 21 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2. 6-8, and 11 of U.S. Patent No. 6146852 is withdrawn.

Applicant has filed a terminal disclaimer.

Rejections Withdrawn

The rejection of claims 21 and 22 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention is withdrawn.

Applicants arguments are persuasive.

Art Unit: 1648

The rejection of claims 21 and 22 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn.

Applicant's arguments are persuasive.

Double Patenting

Claim 21 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2. 6-8, and 11 of U.S. Patent No. 6146852.

Applicant has filed a terminal disclaimer.

Rejections Maintained

Double Patenting

Claim 21 and 22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 33- 35 of copending Application No. 08/340,664. The earlier claims are drawn to a product by process that requires the same method as the instant claim of a method comprising a yeast or E. coli microorganism that expresses exogenous HPTH (1- 84) and is then purified. It would be obvious to use the method of the product by process as a method to make hPTH (1- 84). Both products have the same structure and both are purified so it would be expected that both would have the same physical properties.

This is a <u>provisional</u> obviousness-type double patenting rejection is maintained until one set of claims is patented.

Art Unit: 1648

New Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singh *et al.* and Keutmann *et al.*

Keutmann *et al.* teach the sequence for human parathyroid hormone, disclose that it is only available in limited quantities from natural sources and indicate that a supply would be useful for further study.

Keutmann et al. does not teach protein expression.

Singh *et al.* teach a method of producing secreted proteins in yeast and that the method results in expression of intact biologically active products with the complete sequence (abstract).

One of ordinary skill in the art at the time of invention would have been motivated to make PTH recombinantly to obtain a supply for further study. One of ordinary skill in the art at the time of invention would have been motivated to use the expression method of Singh *et al.* because secreted proteins are easier to purify than non-secreted and the method makes intact proteins that are biologically active. It would have been

Art Unit: 1648

obvious as well to produce the product in *E. coli* because expression systems were known at the time of invention.

Thus, it would have been *prima facie* obvious to produce purified recombinant intact hPTH using the method of Singh *et al.* to make the product of Keutmann *et al.* with the expectation of success of producing a recombinant intact hPTH(1- 84).

Conclusion

The claim is not allowed.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myron G. Hill whose telephone number is 571-272-0901. The examiner can normally be reached on 9am-6pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Myron G. Hill Patent Examiner

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600